CIPEC

Canadian Industry Program for

ENERGY CONSERVATION

2000/2001 SUCCESS STORIES

Natural Resources Canada
Office of Energy Efficiency

Ressources naturelles Canada
Office de l'efficacité énergétique

Canada

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OUR MISSION

To promote effective voluntary action that reduces industrial energy use per unit of production, thereby improving economic performance while participating in meeting Canada's climate change objectives.

A Record of Achievement

Over the past decade, CIPEC has proven with its results that co-operative, voluntary relationships between government and the private sector not only work, they can excel.

Between 1990 and 1999, CIPEC's mining and manufacturing sectors have achieved an average annual energy-intensity improvement of 2 percent per year – double CIPEC's improvement target of 1 percent per year. These improvements recorded by companies under the CIPEC umbrella have helped to reduce energy-related greenhouse gas (GHG) emissions to a level that is 1.9 percent below those in 1990; this despite substantially greater economic activity than a decade ago.

These strides are the result of the combined efforts of thousands of companies in CIPEC's 23 sectors. Today, our network comprises 43 trade and business associations, representing more than 4000 companies and approximately 95 percent of secondary industrial energy demand in Canada. Their contributions, both large and small, have combined to build a record of achievement that places Canadian industry in the forefront of efforts to overcome the challenges of global climate change.

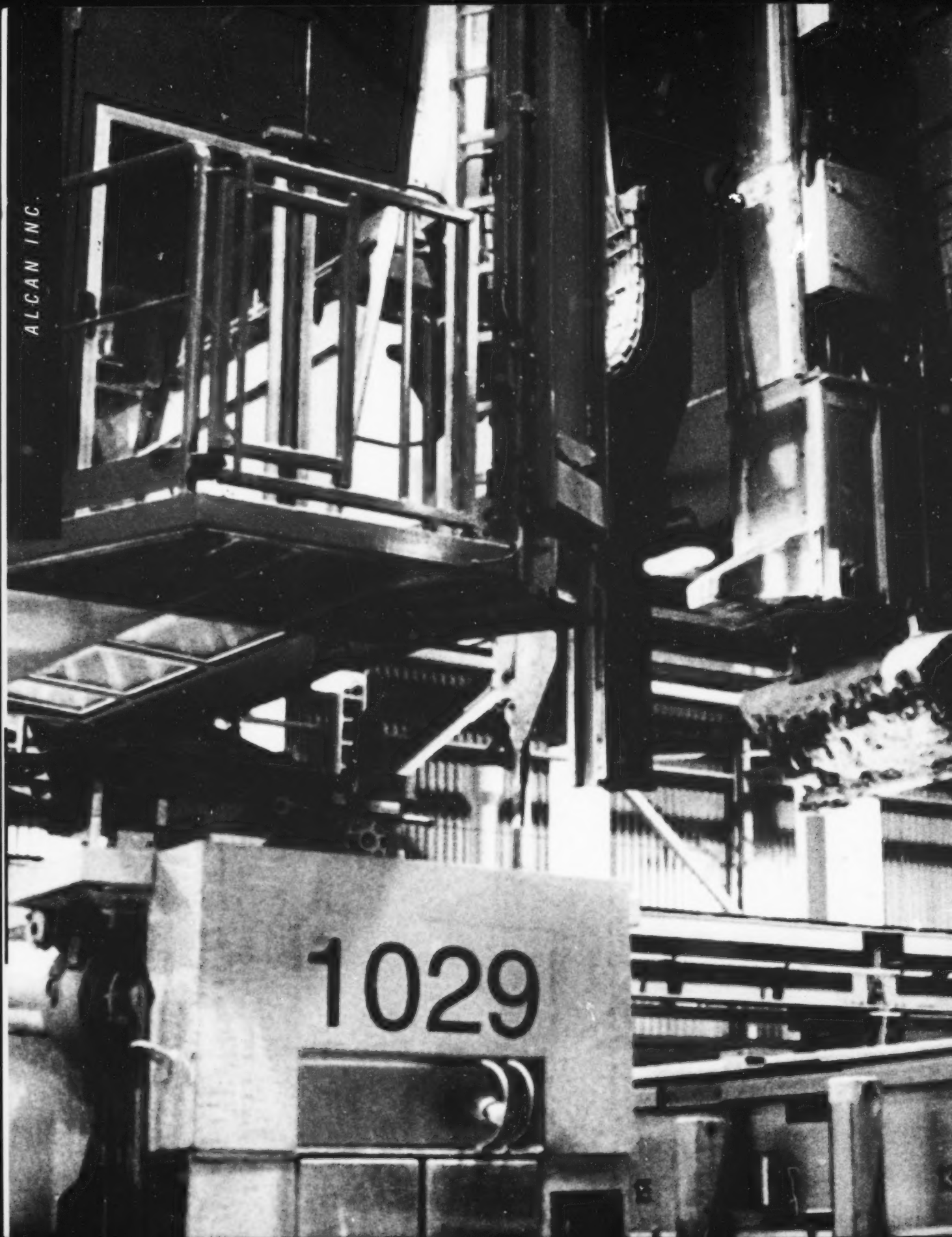
Interest in further improving energy efficiency is thriving as manufacturing and mining companies increasingly recognize the direct relationship between energy efficiency and operating results. Initiatives from nearly every industrial sector across the land are improving energy efficiency, cutting GHG emissions, and helping Canada to meet its international climate change commitments.

In this document, we highlight the recent efforts of 12 companies that have made energy efficiency a key component of their strategic thinking – and a way of life in their operations. Their achievements are representative of the hundreds of success stories that are emerging within the CIPEC family. We present these stories in the hope that they will inspire others to advance energy efficiency programs within their organizations.

After all, it is only through the willingness of individual enterprises to embrace innovation and to adopt new methods and technologies that CIPEC will remain a shining example of voluntary, cross-sectoral co-operation. Through such innovation, the industrial sector will continue to do its part to help Canada achieve its objectives as set out in the Kyoto Protocol.

W. Warren Holmes

Senior Vice-President, Canadian Mining Operations
Falconbridge Limited
Chair, CIPEC Executive Board


ALCAN INC.
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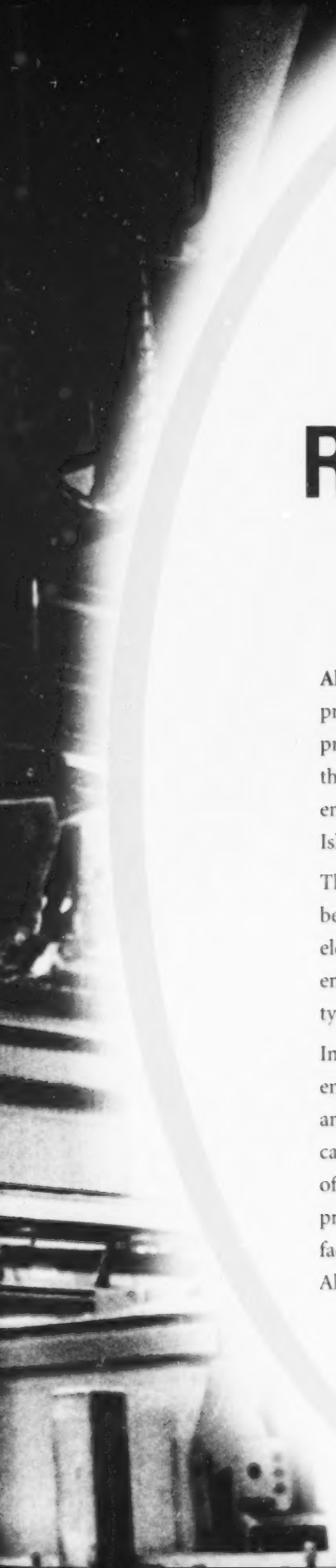


Alcan Inc. on Target to **Reduce GHG Emissions** at State-of-the-Art Facility

Alcan's new $1.6-billion smelter in Alma, Quebec, is the company's first expansion in primary-metals production in two decades and marks the culmination of a rebuilding program begun in the late 1980s. On schedule to be at full production in the third quarter of 2001, the 400 000-tonne Alma smelter, which incorporates the latest energy efficiency technologies, will replace the company's nearby 75 000-tonne facility in Isle-Maligne, Quebec.

The massive plant will require 620 megawatts of power to operate, all of which will be provided by hydro-electricity. Half of the power will come from Alcan's own hydro-electric grid, with the balance provided by Hydro-Québec. Using hydro-electricity will enable the plant to emit only 15 percent of the greenhouse gases (GHGs) produced by typical smelters around the world that use fossil fuel-generated power.

In recent years, Alcan has devoted considerable effort to identify sources of GHG emissions throughout its operations. This has enabled the company to modify practices and introduce new, high-performance technologies at its smelters. The Alma facility carries on this tradition. In fact, by incorporating technologies that enable better control of anode effects, the Alma plant will emit only one tenth of the polyfluorocarbons produced at the Isle-Maligne facility. There is little doubt that the state-of-the-art Alma facility, in addition to the company's recently adopted TARGET program, will enable Alcan to take a giant stride toward its goal of reducing its GHG emissions.

Photo courtesy of Alcan Inc.

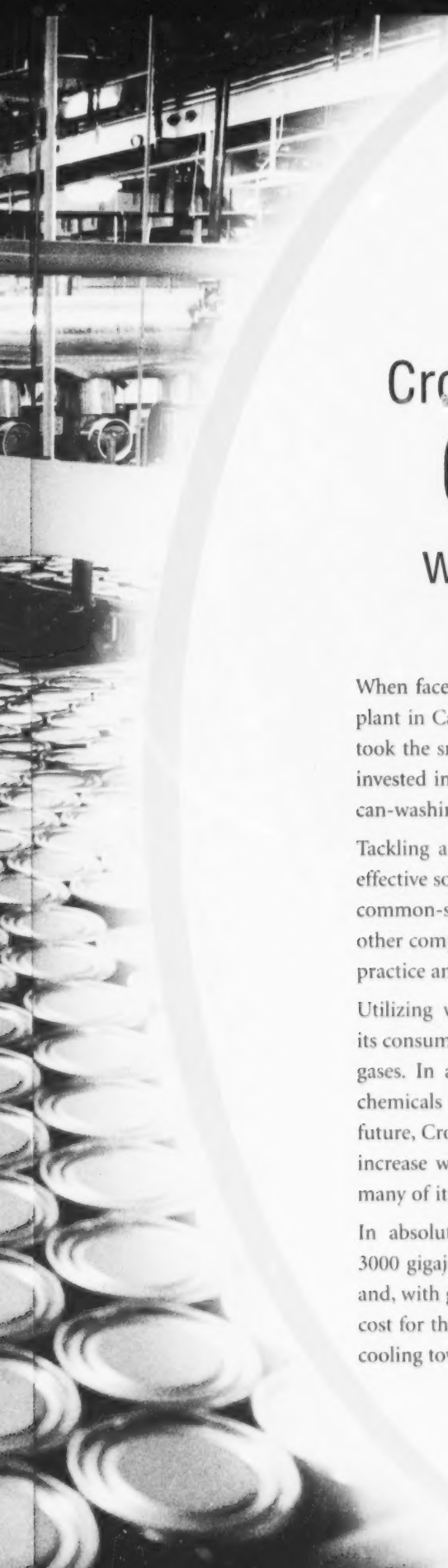
CONNORS BROS. LIMITED

Riding the Wave of
Energy Efficiency at
Connors Bros. Limited

Waste is a four-letter word at **Connors Bros.** The sardine cannery in Blacks Harbour, New Brunswick, has made reducing waste of all kinds a company-wide mandate, going so far as using once-discarded process by-products to create valuable fish meal, fish oil and fertilizer. Since it installed its first power factor controllers in the mid-1970s, the company has been committed to energy efficiency. For example, the company now pumps in seawater to use as a coolant in the plant's air-conditioning system, thereby dramatically reducing the demand for fresh water. A lighting retrofit program has been underway over the past three years, with T-8 fluorescent lamps and compact fluorescents installed in areas throughout the plant.

Beginning in 2000, Connors Bros. initiated improvements to its energy monitoring and tracking system. To further these efforts, the company participated in a "Dollars to $ense: Energy Monitoring and Tracking" workshop offered through Natural Resources Canada's Office of Energy Efficiency. Meters have been installed at key points in the plant, enabling the company to use monitoring and tracking software to spot energy usage anomalies and identify waste instantly, thereby enabling swift corrective action to be taken. When it comes to energy efficiency, Connors Bros. believes that no project is too big or too small to undertake. From using PLC-equivalent microprocessors to improving air-exhaust efficiency, to upgrading with power-saving high-efficiency motors, the company continues to reduce waste wherever it is found.

CROWN CORK & SEAL CANADA, INC.



Crown Cork & Seal Canada, Inc.

Cans Waste Heat

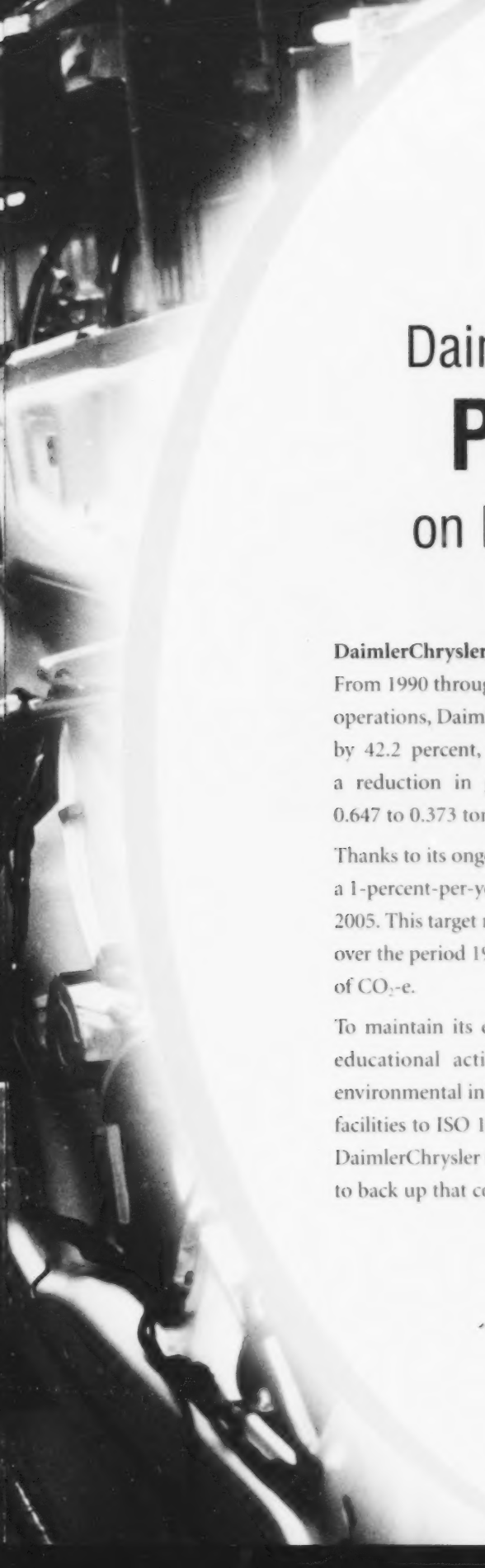
with Common-Sense Solution

When faced with the challenge of removing excess heat from the air compressor at its plant in Calgary, Alberta, **Crown Cork & Seal Canada** didn't take the easy way out – it took the smart approach. Rather than install an additional cooling tower, the company invested in a heat exchanger to capture waste heat and used it to preheat water for the can-washing step in its production process.

Tackling a relatively simple problem with some imagination resulted in a simple but effective solution. Although most industries practice waste-heat utilization, applying this common-sense innovation has improved Crown Cork & Seal's washer operation. Many other companies that use water-cooled compressors or equipment could adopt the same practice and improve their bottom line.

Utilizing waste heat decreased the company's boiler requirements, thereby reducing its consumption of natural gas by 5 percent and decreasing its production of greenhouse gases. In addition to its straight gas savings, the plant has been able to reduce the chemicals used in its washer and has made minor savings in water consumption. In the future, Crown Cork & Seal hopes to use more of the waste heat from the compressor to increase washer water temperature. The company plans to implement this practice at many of its operations worldwide to achieve the same benefits.

In absolute terms, the project has reduced the plant's energy use by more than 3000 gigajoules per year. The cost of natural gas saved is slightly over $12,000 per year and, with gas prices expected to increase, the value of this project can only improve. The cost for the readily available commercial unit used for this project was $6,500. A typical cooling tower would have cost more than $25,000.



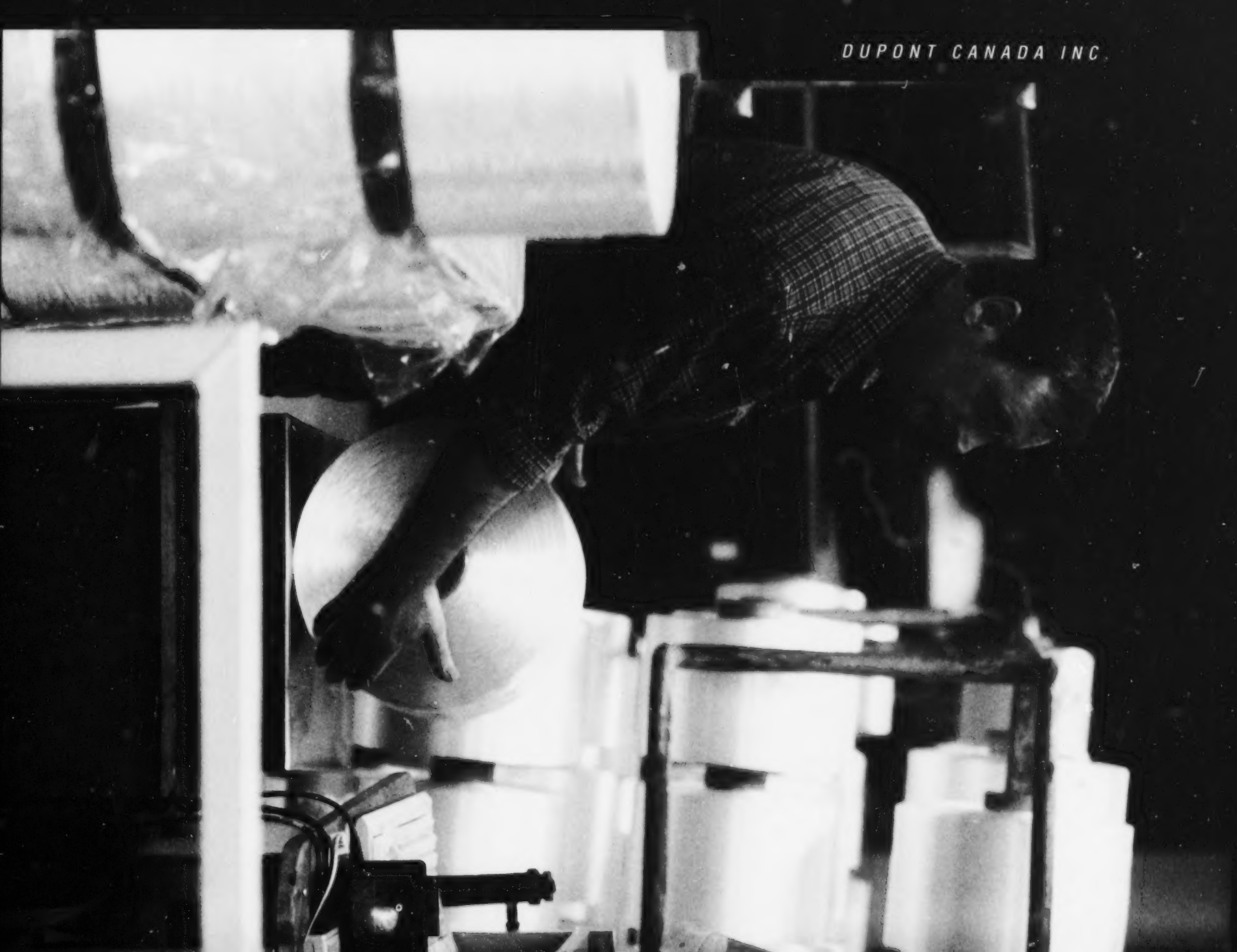
DaimlerChrysler Canada Inc.
Picks up Speed
on Road to Energy Efficiency

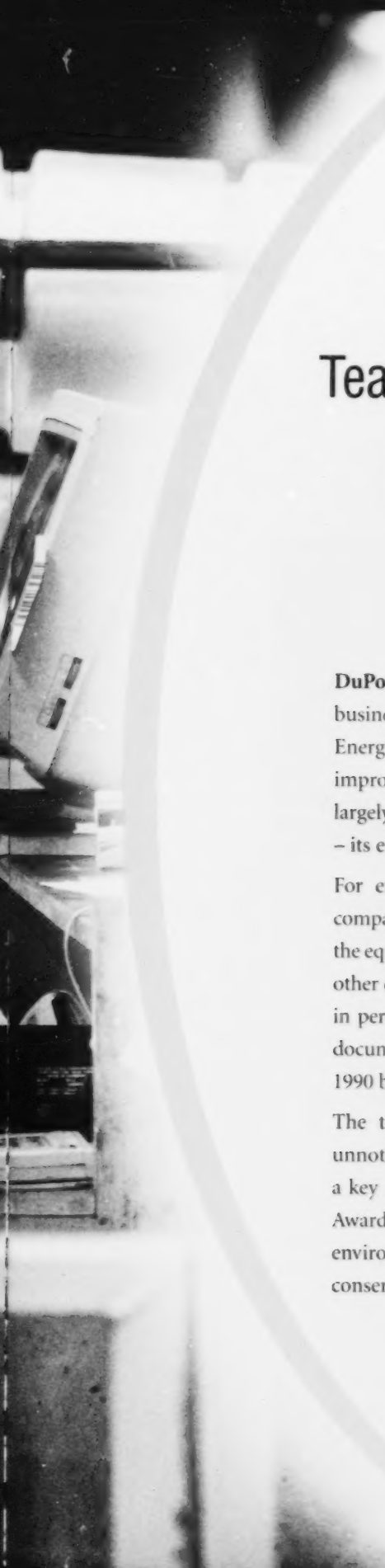
DaimlerChrysler Canada has an impressive track record in energy conservation. From 1990 through 1999, by focusing on energy efficiency throughout its manufacturing operations, DaimlerChrysler Canada reduced the energy consumed per vehicle produced by 42.2 percent, from 12.36 MMBtu to 7.15 MMBtu. This improvement represents a reduction in greenhouse gas (GHG) emissions per vehicle manufactured from 0.647 to 0.373 tonne of carbon dioxide equivalent (CO_2-e) over the same period.

Thanks to its ongoing emphasis on energy efficiency, DaimlerChrysler Canada anticipates a 1-percent-per-year decrease in energy intensity per vehicle produced from 1999 through 2005. This target represents a reduction in energy use per vehicle produced of 45.5 percent over the period 1990–2005, leading to decreased GHG emissions per vehicle of 0.30 tonne of CO_2-e.

To maintain its energy efficiency momentum, DaimlerChrysler Canada is conducting educational activities with employees and unions. To support these and other environmental initiatives, the company is working toward certifying each of its Canadian facilities to ISO 14001 status by the end of 2001. This is a powerful message that signals DaimlerChrysler Canada's commitment to environmental stewardship and its willingness to back up that commitment with action.

Photo courtesy of DaimlerChrysler Canada Inc.





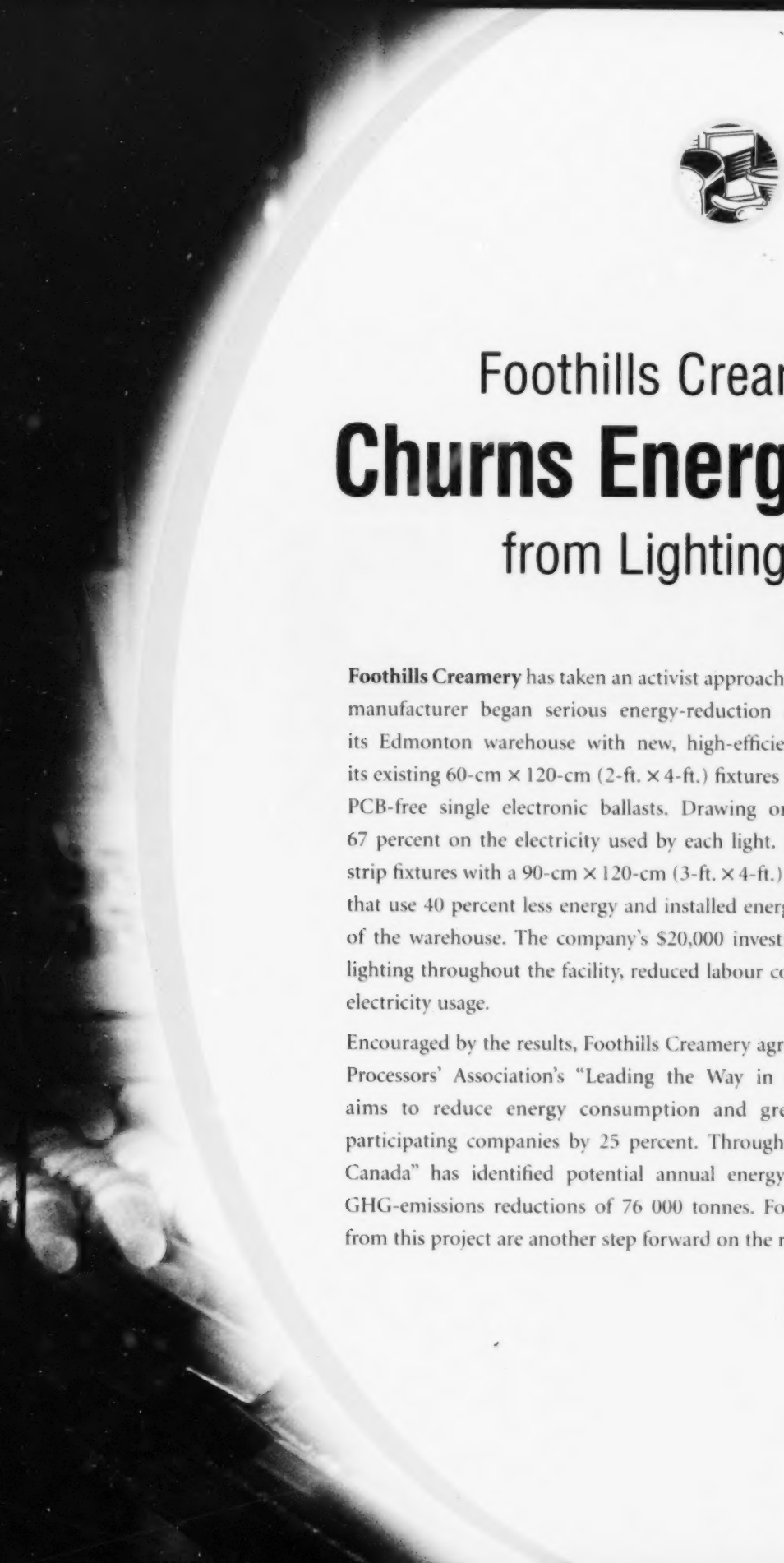
Teamwork Leads DuPont Canada Inc. to Score on Energy Reduction Goals

DuPont Canada has successfully merged energy and environmental goals with its business objectives. More than 25 years ago, the company established its Manufacturing Energy Management Team (MEMT), an interdepartmental group that focused on improving energy efficiency throughout the company's Canadian operations. Thanks largely to MEMT's leadership, DuPont Canada consistently achieves – and often exceeds – its energy goals.

For example, a new high-temperature, heat-transfer fluid vaporizer installed at the company's plant in Kingston, Ontario, has a heat efficiency that is 20 percent greater than the equipment it replaced, resulting in savings of 20.4 terajoules per year. Because of this and other energy efficiency projects, MEMT achieved its 10-year goal of a 25-percent reduction in per-unit energy consumption – six years ahead of schedule. Since 1993, the team has documented more than $20 million in cost reductions for DuPont Canada, and between the 1990 baseline year and 1999, it drove total energy consumption reductions of 28 percent.

The team's contribution to DuPont Canada's business performance has not gone unnoticed. Peter Chantraine, a tireless advocate of energy efficiency, chair of MEMT and a key member of CIPEC, was awarded DuPont Canada's highest honour, the Daedalus Award. His leadership and ability to see the big picture in the company's energy and environmental management has helped make DuPont Canada a leader in energy conservation and climate change.

FOOTHILLS CREAMERY LTD.



Foothills Creamery Ltd.

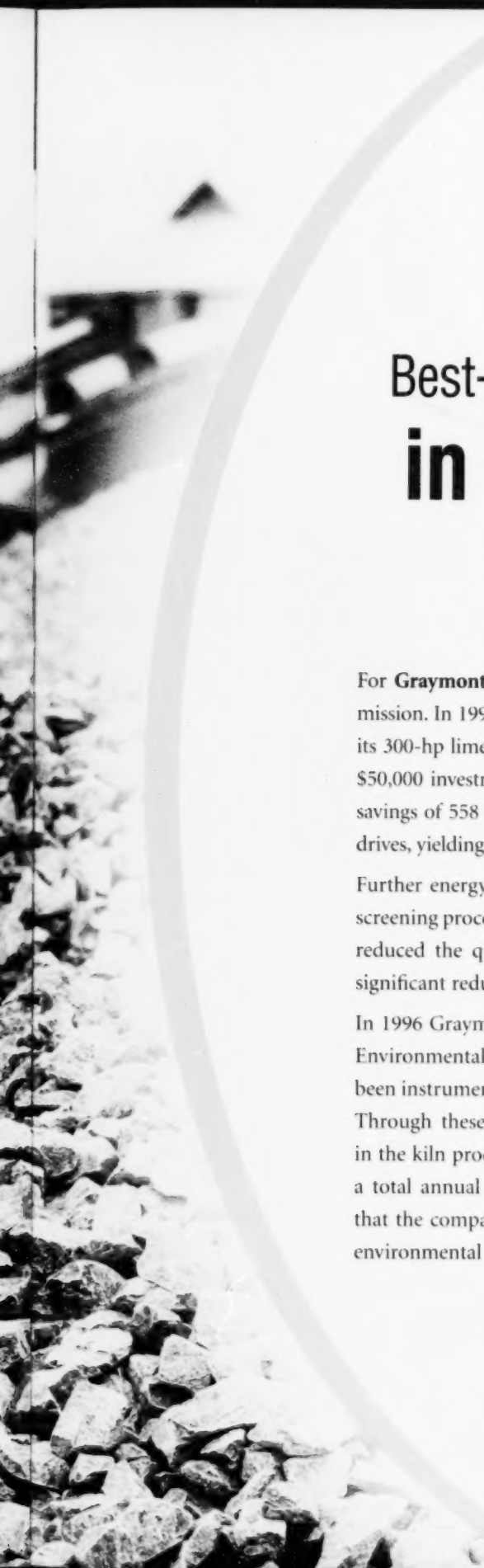
Churns Energy Savings

from Lighting Retrofit

Foothills Creamery has taken an activist approach to energy efficiency. The Alberta dairy manufacturer began serious energy-reduction efforts in 1998, when it retrofitted its Edmonton warehouse with new, high-efficiency lighting. The company replaced its existing 60-cm × 120-cm (2-ft. × 4-ft.) fixtures with T-8 lamps and reflectors that use PCB-free single electronic ballasts. Drawing only 58 watts, the new fixtures save 67 percent on the electricity used by each light. Foothills also replaced 240-cm (8-ft.) strip fixtures with a 90-cm × 120-cm (3-ft. × 4-ft.) lamp system with industrial reflectors that use 40 percent less energy and installed energy-saving motion sensors in key areas of the warehouse. The company's $20,000 investment in the retrofit has led to better lighting throughout the facility, reduced labour costs and realized significant savings in electricity usage.

Encouraged by the results, Foothills Creamery agreed to participate in the Alberta Food Processors' Association's "Leading the Way in Canada" pilot project. This project aims to reduce energy consumption and greenhouse gas (GHG) emissions at participating companies by 25 percent. Through energy audits, "Leading the Way in Canada" has identified potential annual energy savings of $6 million and related GHG-emissions reductions of 76 000 tonnes. For Foothills Creamery, energy savings from this project are another step forward on the road to better business performance.

GRAYMONT (NB) INC.



Best-Management Practices Pay off **in Energy Efficiency** at Graymont (NB) Inc.

For **Graymont (NB)**, finding ways to reduce its energy consumption is a key corporate mission. In 1995 the New Brunswick lime producer installed a variable frequency drive on its 300-hp lime kiln exhaust fan. With the fan operating around the clock, the company's $50,000 investment has reduced electricity consumption by 8 percent and netted annual savings of 558 000 kWh. Impressed with the results, the company installed more variable drives, yielding additional savings.

Further energy savings emerged as a by-product of changes made in the crushing and screening process. These improvements increased the yield of kiln feed stone by 5 percent, reduced the quarrying period by two weeks over a seven-month period, and led to significant reductions in the use of electricity and fuel-powered mobile equipment.

In 1996 Graymont (NB) established an energy committee that was later replaced by an Environmental Management System designed on the ISO 14000 model. This system has been instrumental in identifying numerous opportunities to reduce energy consumption. Through these and other initiatives, Graymont (NB) has reduced the energy needed in the kiln process from 105.8 litres of oil per tonne of product to 99.6 litres, leading to a total annual saving of 440 000 litres of oil. These reductions are a clear indication that the company's application of cost-effective, best-management practices to advance environmental protection is delivering results.

INCO LIMITED

Inco Limited Mines Savings with **Energy Breakthrough** System

Inco takes its leadership in the mining sector seriously. A mine-development and operating company with more than 10 000 employees and offices in 15 countries around the world, the company is a global leader in metal extraction and supply. Despite its size, operational diversity and international scope, the company has eagerly placed environment, health and safety among its highest corporate priorities and has annually backed its commitment by establishing aggressive energy action plans for its operations.

In 1999, to extend the scope and reach of its energy efficiency efforts, Inco introduced its Energy Breakthrough (EB) system. EB recognizes that energy management and reductions in greenhouse gas emissions require a system-wide approach with direct, defined responsibilities at each level of management. With Inco's commitment to targets that are among the most aggressive in Canadian industry, EB provides the necessary foundation for company-wide action.

Even before EB was introduced, Inco's energy efficiency efforts delivered results. The company's absolute emissions decreased from 939 kilotonnes of CO_2-e in 1998 to 926 kilotonnes in 1999, despite a temporary, short-term increase in its energy and emissions indices. Moreover, Inco reduced its 1999 energy index by 9 percent relative to 1990, fully meeting the company's target of a 1-percent annual improvement. EB, with its formal structure and aggressive targets, should enable Inco to build on these improvements long into the future.

LAKE ERIE STEEL COMPANY

Lake Erie Steel Company

Blasts Energy Costs

with Innovative Project

Innovative thinking at **Lake Erie Steel Company** is yielding big energy savings. The company is using steam that is produced by waste blast-furnace gas to power air compressors in the cryogenic air-separation plant at its smelter in Nanticoke, Ontario. Lake Erie Steel located the new plant between its boiler house and cooling towers, enabling it to make better use of the steam generation and distribution system already in place, reduce connection costs and utilize its existing capacity to turn blast-furnace gas into steam. To make the process work, the company invested in a new steam turbine, auxiliary equipment and an enlarged cooling plant.

This project demonstrates that wherever a process that produces high-grade waste heat requires oxygen or nitrogen, recovered energy can be used to drive the generation of the gases. This can be applied not only in smelting, but also in steel basic-oxygen furnaces, pulp and paper mills, textiles and chemical manufacturing.

As a result of this project, Lake Erie Steel is using a no-cost, previously wasted energy source to replace purchased energy. The results are impressive. The company has reduced its energy usage by 192 terajoules per year and is saving about $1.7 million in annual operating costs. Moreover, the company has increased its blast furnace's productivity by 25 percent and has significantly reduced its NO_x and carbon dioxide emissions by 91 tonnes and 47 000 tonnes per year respectively.

MANOIR INC.
AVOIR

Manoir Inc.
Throws Cold Water
on Rising Energy Costs

To become a leader in the textile industry, **Manoir,** located in Saint-Laurent, Quebec, began from scratch. In 1994 the company built a dye house to contain new equipment that produces superior-quality fabric while reducing water and energy consumption.

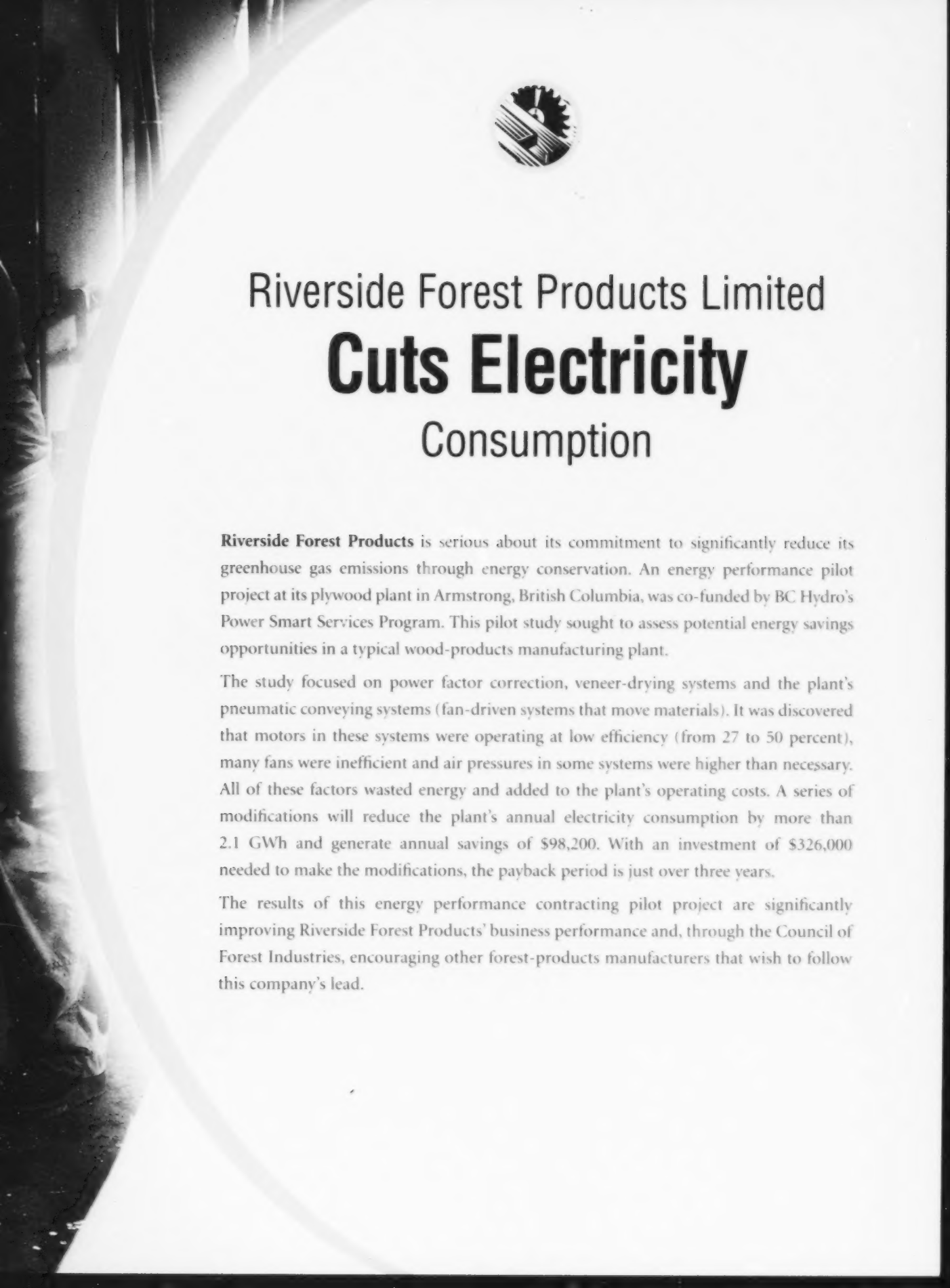
With the dyeing process consuming three times as much water as the bleaching process, Manoir came up with two solutions to reduce its water use – a cool-rinse process and a pulsating rinse. The cool-rinse process allows for simultaneous rinsing and cooling, which reduces cycle times and energy consumption. The pulsating rinse dilutes the dye bath gradually while the machine is operating. This process uses 20 to 30 percent less water and takes less time.

The recently installed central heat recovery and exchange system is another key component in Manoir's energy efficiency program. The main aspect of the system is that drainage from the dye machine, when passed through the coiled heat-exchange station, exits at a cooler temperature. The cooling water used in the process is thus heated and stored for later use in reservoir tanks. This system ensures a virtually constant supply of water at 52°C, compared to municipal water temperatures of close to 0°C in winter and up to 7°C in summer. This not only affords considerable savings in energy but also enables Manoir to respect effluent temperature requirements.

RIVERSIDE FOREST PRODUCTS LIMITED

RIVERSIDE
FOREST PRODUCTS LIMITED

UNI-



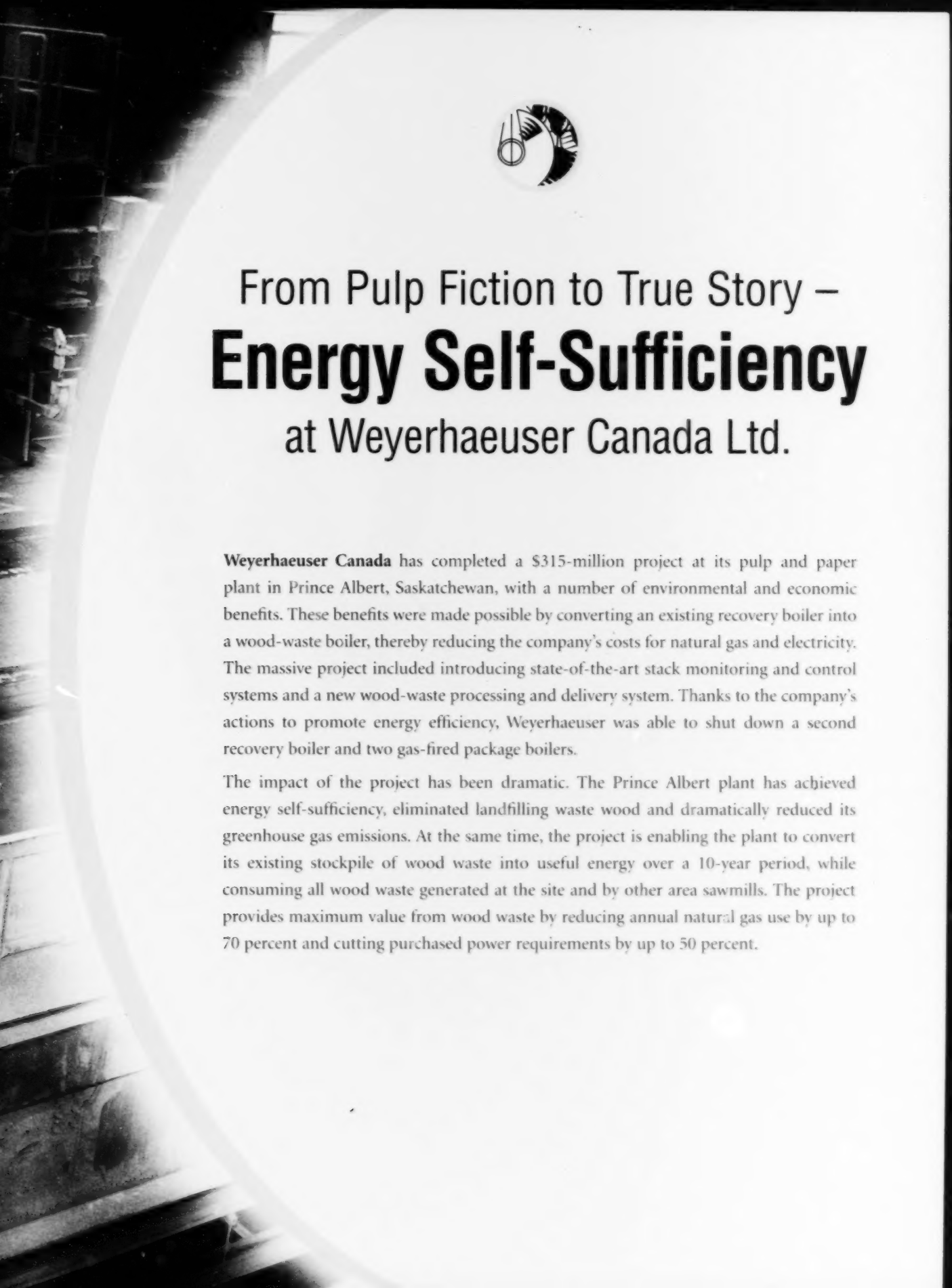
Riverside Forest Products Limited
Cuts Electricity
Consumption

Riverside Forest Products is serious about its commitment to significantly reduce its greenhouse gas emissions through energy conservation. An energy performance pilot project at its plywood plant in Armstrong, British Columbia, was co-funded by BC Hydro's Power Smart Services Program. This pilot study sought to assess potential energy savings opportunities in a typical wood-products manufacturing plant.

The study focused on power factor correction, veneer-drying systems and the plant's pneumatic conveying systems (fan-driven systems that move materials). It was discovered that motors in these systems were operating at low efficiency (from 27 to 50 percent), many fans were inefficient and air pressures in some systems were higher than necessary. All of these factors wasted energy and added to the plant's operating costs. A series of modifications will reduce the plant's annual electricity consumption by more than 2.1 GWh and generate annual savings of $98,200. With an investment of $326,000 needed to make the modifications, the payback period is just over three years.

The results of this energy performance contracting pilot project are significantly improving Riverside Forest Products' business performance and, through the Council of Forest Industries, encouraging other forest-products manufacturers that wish to follow this company's lead.

WEYERHAEUSER CANADA LTD.



From Pulp Fiction to True Story – **Energy Self-Sufficiency** at Weyerhaeuser Canada Ltd.

Weyerhaeuser Canada has completed a $315-million project at its pulp and paper plant in Prince Albert, Saskatchewan, with a number of environmental and economic benefits. These benefits were made possible by converting an existing recovery boiler into a wood-waste boiler, thereby reducing the company's costs for natural gas and electricity. The massive project included introducing state-of-the-art stack monitoring and control systems and a new wood-waste processing and delivery system. Thanks to the company's actions to promote energy efficiency, Weyerhaeuser was able to shut down a second recovery boiler and two gas-fired package boilers.

The impact of the project has been dramatic. The Prince Albert plant has achieved energy self-sufficiency, eliminated landfilling waste wood and dramatically reduced its greenhouse gas emissions. At the same time, the project is enabling the plant to convert its existing stockpile of wood waste into useful energy over a 10-year period, while consuming all wood waste generated at the site and by other area sawmills. The project provides maximum value from wood waste by reducing annual natural gas use by up to 70 percent and cutting purchased power requirements by up to 50 percent.

Aluminum

Alcan Inc.
Aluminerie Alouette inc.
Aluminerie de Becancour inc.
Aluminerie Lauralco Inc.
Canadian Reynolds Metals Company Limited

Cement

Blue Circle Cement
ESSROC Canada Inc.
Inland Cement Limited
Lafarge Canada Inc.
North Star Cement Ltd.
St. Lawrence Cement Inc.
Tilbury Cement Ltd.

Chemicals

Chinook Group Limited – Sombra Plant
Degussa-Hüls Canada Inc.
DuPont Canada Inc.
Elementis Pigments Canada
MDS Nordion Inc.
Nacan Products Limited
NOVA Chemicals Corporation
OxyVinyls Canada Inc.
PolyOne Canada Inc.
Rohm and Haas Canada Inc.

Electrical/Electronics

ASCOlectric Ltd.
Broan-NuTone Canada
Camco Inc.
Honeywell Limited
IBM Canada Ltd.
Nortel (Northern Telecom Limited)
Osram Sylvania Ltd.
Siemens – Technologies du Bâtiment Ltée (division Landis)
Vansco Electronics Ltd.

Food and Beverage

Alberta Processing Co., A Division of West Coast Reduction Ltd.
Andrés Wines Ltd.
API Grain Processors
Armstrong Cheese Company Ltd. – Alberta
Better Beef Ltd.
Big Rock Brewery Ltd.
Black Velvet Distilling Co.
Borden Foods Canada
Canada West Foods L.V. Inc.
Canamera Foods
Canbra Foods Ltd.
Canyon Creek Soup Company Ltd.
Cargill Animal Nutrition – Camrose Plant
Cargill Animal Nutrition – Lethbridge Plant
Casco Inc.
Champion Petfoods
Coca-Cola Bottling Ltd.
Cuddy Food Products
Family Muffins & Desserts Inc.
Foothills Creamery Ltd.
Garden Province Meats Inc.
Heritage Frozen Foods Ltd.
H.J. Heinz Company of Canada Ltd.
Hub Meat Packers Ltd. – Sunrise Brand
Hubberts Industries
Kraft Canada Inc.
Labatt Breweries of Canada
Legal Alfalfa Products Ltd.
Lilydale Cooperative Ltd.
Lone Pine Cheese Ltd.
Maple Leaf Consumer Foods
Maple Leaf Pork – Alberta
Maple Leaf Pork – Ontario
Maple Lodge Farms Ltd.
McCain Foods (Canada) – Alberta, A Division of McCain Foods Limited
Molson Breweries – Edmonton Brewery
Molson Canada – Ontario
Moosehead Breweries Ltd.
Nestlé Canada Inc.
Northern Alberta Processing Co., A Division of West Coast Reduction Ltd.
Olymel, L.P.
Parmalat Canada Ltd. – Alberta
Pepsi-Cola Canada Beverages
Prairie Mushrooms (1992) Ltd.
Principality Foods Ltd.
Quality Fast Foods
Sakai Spice (Canada) Corporation
Schneider Foods
Sleeman Brewing and Malting Co. Ltd.
Sunrise Bakery Ltd.
Sun-Rype Products Ltd.
Transfeeder Inc.
Trochu Meat Processors
Unifeed Premix
Versacold Corporation
Westcan Malting Ltd.
Westglen Milling Ltd.
Weston Foods Inc.

Foundry

Ancast Industries Ltd.
Crowe Foundry Limited
Diversa Cast Manufacturing (A Division of Comtech Mfg. Ltd.)
ESCO Limited – Port Hope Operations
Eureka Foundry Corporation (A Subsidiary of ACI Canada Inc.)
Gamma Foundries Limited
Grenville Castings Limited
Wabi Iron & Steel Corporation
Wescast Industries Inc.

General Manufacturing

3M Canada Inc.
ABCO Property Management Inc.
Canadian Uniform Limited
Champion Feed Services Ltd.
Coyle & Greer Awards Canada Ltd.
Crown Cork & Seal Canada, Inc.
EMCO Limited – Building Products
Envirogard Products Ltd.
Escalator Handrail Company Inc.
Euclid-Hitachi Heavy Equipment Ltd.
Federated Co-operatives Limited
Ferraz Shawmut Canada Inc.
Fibrex Insulations, Inc.
Garland Commercial Ranges Limited
Greif Containers Inc.
Imperial Home Decor Group Canada Inc.
Imperial Tobacco Limited
Interface Flooring Systems (Canada) Ltd.
International Paper Industries Ltd.
Jones Packaging Inc.
Kindred Industries
Kodak Canada Inc.
LePage (Division of Henkel Canada Limited)
Maksteel Service Centre (Division of Makagon Industries Ltd.)
Marcel Lauzon Inc.
Metroland Printing, Publishing & Distributing Ltd.
Owens Corning Canada Inc. – Toronto Plant
Polytainers Inc.
PRO-ECO Limited

Regent Eco Canada
Sandvik Tamrock Canada Inc.
Sandvik Tamrock Loaders Inc.
Scapa Tapes North America
S.C. Johnson and Son, Limited
Simmons Canada Inc.
Soprema Inc. (usine de Drummondville)
Superior Radiant Products Ltd.
Teknion Furniture Systems Inc.
VicWest Steel
Viskase Canada Inc.
Wabash Alloys Ontario
Wyeth-Ayerst Canada Inc.

Lime

Beachville Lime Limited
Chemical Lime Company of Canada Inc.
Dundas Lime Limited
Graymont (NB) Inc.
Graymont (QC) Inc.
Graymont Western Canada Inc.
Northern Lime Limited

Mining

Aur Resources Inc.
Barrick Gold Corporation – La mine Doyon (Division of Cambior Inc.)
BHP Diamonds Inc.
Boliden Limited
Canadian Electrolytic Zinc Limited
Cominco Ltd.
Echo Bay Mines Ltd. – Lupin Operation
Falconbridge Limited
Fonderie Horne – Metallurgie Noranda inc.
Hillsborough Resources Limited
Hudson Bay Mining & Smelting Co., Ltd.
Inco Limited
International Minerals and Chemicals (Canada) Global Limited (IMC Kalium Canada Ltd.)
Iron Ore Company of Canada
Mines et exploration Noranda inc. – division de Matagami
Mines Wabush (gerées par la Compagnie miniere Cliffs inc.)
Newmont Canada Limited, Golden Giant Mine
Noranda Inc. – Brunswick Mining Division
Noranda Inc. – Brunswick Smelter
Noranda Metallurgy Inc. (Canadian Copper Refinery)
Placer Dome Canada Limited
Quebec Cartier Mining Company
Syncrude Canada Ltd.
Teck Corporation

Petroleum Products

Amoco Canada Petroleum Company Limited
Canadian Tire Petroleum
Chevron Canada Limited – Burnaby Refinery
Enbridge Pipelines Inc.
Husky Oil Operations Ltd.
Imperial Oil Limited
Irving Oil Limited
Nova Corporation
Parkland Refining Ltd.
Petro-Canada
Safety-Kleen Corp.
Shell Canada Products Limited
Suncor Energy Inc. – Sunoco Group
Ultramar Ltd. (Saint-Romuald refinery)

Plastics

The Clorox Company of Canada, Ltd.
Downeast Plastics Ltd.
Husky Injection Molding Systems Ltd.

Potash

Potash Corporation of Saskatchewan Inc.
– Allan Division
– Cory Division
– Lanigan Division
– New Brunswick Division
– Patience Lake Division
– Rocanville Division

Pulp and Paper/Forestry

Abitibi-Consolidated Inc.
Bowater Pulp and Paper Canada Inc.
Canfor Corporation
Cariboo Pulp and Paper Company Limited
Cascades Inc.
Daishowa Inc.
Emballages Smurfit-Stone Canada inc. – usine de La Tuque
Eurocan Pulp & Paper Company Limited
E.E. Soucy Inc.
Kruger Inc.
Lake Utopia Paper
Marathon Pulp Inc.
Maritime Paper Products Limited
Nexfor Inc.
Norampac Inc. (Division of Cascades Inc.)
Norske Skog Canada Ltd.
Paperboard Industries International Inc. (Division of Cascades Inc.)
Perkins Papers Inc. (Division of Cascades Inc.)
Riverside Forest Products Limited, Armstrong Division
Rolland Inc. (Division of Cascades Inc.)
St. Marys Paper Ltd.
Stora Enso North America, Port Hawkesbury Mill
Stowe Woodward Co. (British Columbia) (Division of Cascades Inc.)
Tembec Inc.
Tembec Paper Group – Spruce Falls Operations
UPM-Kymmene Corporation
Weldwood of Canada Limited
West Fraser Timber Co. Ltd.
Weyerhaeuser Canada Ltd.

Rubber

Gates Canada Inc.
Michelin North America (Canada) Inc.
NRI Industries Inc.

Steel

Algoma Steel Inc.
AltaSteel Ltd.
Atlas Specialty Steels (A Division of Slater Stainless Corp.)
CHT Steel Company Inc.
Co-Steel LASCO
Dofasco Inc.
Frost Fence & Wire Products Ltd.
GenFast Manufacturing Co.
Gerdau Courtice Steel Inc.
Hilton Works (A Division of Stelco Inc.)
Ivaco Inc. (Ivaco Rolling Mills)
Lake Erie Steel Company (A Division of Stelco Inc.)
Laurel Steel (Division of Harris Steel Limited)
QIT – Fer et Titane inc.
Slater Steel Inc. – Hamilton Specialty Bar Division
Stelco Inc.
Stelco-McMaster Ltée
Stelfil Ltée
Stelpipe Ltd.
Stelwire Ltd.
Sydney Steel Corporation
Welland Pipe Ltd.

Textiles

Agmont Inc.
Alharrie Canada Limited
Barrday Inc.
Beaulieu Canada Inc.
Bennett Fleet (Quebec) Inc.
Britex Group (The)
C.S. Brooks Canada Inc. (Magog)
Cambridge Towel Corporation (The)
Cavalier Textiles
Coats and Clark Canada
Coats Bell
Collingwood Fabrics Inc.
Collins & Aikman Canada Inc.
Consoltex Inc.
CookshireTex inc.
Denim Swift
Fabrene Inc.
Glendale Yarns Inc.
J.L. de Ball Canada Inc.
LaGran Canada Inc.
Lincoln Fabrics Ltd.
Manoir Inc.
Monterey Textiles (1996) Inc.
Nova Scotia Textiles, Limited
PGI-DIFCO Performance Fabrics Inc.
Spinrite Inc.
St. Lawrence Corporation
Stedfast Inc.
Velcro Canada Inc.
VOA Colfab Inc.

Transportation Manufacturing

Accuride Canada Inc.
Boeing Toronto Limited
Bombardier Inc. – Usine de Valcourt
CAMI Automotive Inc.
Canadian General-Tower Limited
DaimlerChrysler Canada Inc.
Dura Automotive Systems (Canada), Ltd.
Ford Motor Company of Canada, Limited
General Motors of Canada Limited
Honda of Canada Mfg.
International Truck and Engine Corporation Canada
Oetiker Limited
Orenda Aerospace Corporation
Orion Bus Industries Inc.
Oxford Automotive, Inc. – Suspension Division, Chatham
Polywheels Manufacturing Ltd.
Pratt & Whitney Canada Inc.
Presstran Industries
Prévost Car Inc.
Rockwell Automation Canada Inc.
Russel Metals Inc.
Sterling Trucks, A Division of Freightliner Limited
Toyota Motor Manufacturing Canada Inc.
TRW Automotive
Volvo Cars of Canada Ltd.
Woodbridge Group (The)

Aluminum

Alcan Inc.
Aluminerie Alouette Inc.
Aluminerie de Becancour Inc.
Aluminerie Lauralco Inc.
Canadian Reynolds Metals Company Limited

Cement

Blue Circle Cement
ESSROC Canada Inc.
Inland Cement Limited
Lafarge Canada Inc.
North Star Cement Ltd.
St. Lawrence Cement Inc.
Tilbury Cement Ltd.

Chemicals

Chinook Group Limited – Sombra Plant
Degussa-Huls Canada Inc.
DuPont Canada Inc.
Elementis Pigments Canada
MDS Nordion Inc.
Nacan Products Limited
NOVA Chemicals Corporation
OxyVinyls Canada Inc.
PolyOne Canada Inc.
Rohm and Haas Canada Inc.

Electrical/Electronics

ASI Electric Ltd.
Broan-NuTone Canada
Camco Inc.
Honeywell Limited
IBM Canada Ltd.
Nortel (Northern Telecom Limited)
Osram Sylvania Ltd.
Siemens – Technologies du Batiment Ltee (division Landis)
Vansco Electronics Ltd.

Food and Beverage

Alberta Processing Co., A Division of West Coast Reduction Ltd.
Andres Wines Ltd.
API Grain Processors
Armstrong Cheese Company Ltd. – Alberta
Better Beef Ltd.
Big Rock Brewery Ltd.
Black Velvet Distilling Co.
Borden Foods Canada
Canada West Foods L.P. Inc.
Canamera Foods
Canbra Foods Ltd.
Canyon Creek Soup Company Ltd.
Cargill Animal Nutrition – Camrose Plant
Cargill Animal Nutrition – Lethbridge Plant
Casco Inc.
Champion Petfoods
Coca-Cola Bottling Ltd.
Cuddy Food Products
Family Muffins & Desserts Inc.
Ivanhoe Creamery Ltd.
Golden Prairie Meats Inc.
Heritage Frozen Foods Ltd.
H.J. Heinz Company of Canada Ltd.
Hub Meat Packers Ltd. – Sunrise Brand
Hudsons Industries
Kraft Canada Inc.
Labatt Breweries of Canada
Legal Meats Products Ltd.
Lilydale Cooperative Ltd.
Lone Pine Cheese Ltd.
Maple Leaf Consumer Foods
Maple Leaf Pork – Alberta
Maple Leaf Pork – Ontario
Maple Lodge Farms Ltd.
McCain Foods (Canada) – Alberta, A Division of McCain Foods Limited
Molson Breweries – Edmonton Brewery
Molson Canada – Ontario
Moosehead Breweries Ltd.
Nestle Canada Inc.
Northern Alberta Processing Co., A Division of West Coast Reduction Ltd.
Olymel L.P.
Parmalat Canada Ltd. – Alberta
Pepsi-Cola Canada Beverages
Prairie Mushrooms (1992) Ltd.
Principality Foods Ltd.
Quality Fast Foods
Sakat Spice Canada Corporation
Schneider Foods
Sleeman Brewing and Malting Co. Ltd.
Sunrise Bakery Ltd.
Sun-Rype Products Ltd.
Transfeeder Inc.
Tyndall Meat Processors
United Poultry
Versacold Corporation
Westcan Malting Ltd.
Westglen Milling Ltd.
Weston Foods Inc.

Foundry

Ancast Industries Ltd.
Crowe Foundry Limited
Diversa Cast Manufacturing – A Division of Conmech Mfg. Ltd.
ESCO Limited – Port Hope Operations
Eureka Foundry Corporation – A Subsidiary of ACT Canada Inc.
Gamma Foundries Limited
Grenville Castings Limited
Wabi Iron & Steel Corporation
Wescast Industries Inc.

General Manufacturing

3M Canada Inc.
ABCO Property Management Inc.
Canadian Uniform Limited
Champion Feed Services Ltd.
Coyle & Greer Awards Canada Ltd.
Crown Cork & Seal Canada, Inc.
EMCO Limited – Building Products
Envirogard Products Ltd.
Escalator Handrail Company Inc.
Euclid-Hitachi Heavy Equipment Ltd.
Federated Co-operatives Limited
Ferraz Shawmut Canada Inc.
Fibrex Insulations, Inc.
Garland Commercial Ranges Limited
Greif Containers Inc.
Imperial Home Decor Group Canada Inc.
Imperial Tobacco Limited
Interface Flooring Systems (Canada) Ltd.
International Paper Industries Ltd.
Jones Packaging Inc.
Kindred Industries
Kodak Canada Inc.
LePage, Division of Henkel Canada Limited
Material Service Centre, Division of Mascagon Industries Ltd.
Marvel Lumber Inc.
Metrostand Printing, Publishing & Distributing Ltd.
Owens-Corning Canada Inc. – Toronto Plant
Polystamers Inc.
PRO-TECO Limited

Argent Lav Canada
Atlas® Tamrock Canada Inc.
Atlas® Tamrock Loaders Inc.
Sandvik Tamrock North America
W.C. Johnson and Son Limited
Wajax Canada Inc.
Soquem Inc. – usine de Drummondville
Superior Radiant Products Ltd.
Teknion Furniture Systems Inc.
TechWest Steel
Tenaxe Canada Inc.
Walsh Alloys Ontario
Wirth Ascent Canada Inc.

Lime

Beachville Lime Limited
Chemical Lime Company of Canada Inc.
Dundas Lime Limited
Graymont (NB) Inc.
Graymont (QC) Inc.
Graymont Western Canada Inc.
Northern Lime Limited

Mining

Air Resources Inc.
Battrick Gold Corporation – La mine Dixon (Division of Cambior Inc.)
BHP Diamonds Inc.
Boliden Limited
Canadian Electrolytic Zinc Limited
Cominco Ltd.
Echo Bay Mines Ltd. – Lupin Operation
Falconbridge Limited
Fonderie Horne – Metallurgie Noranda inc.
Hillsborough Resources Limited
Hudson Bay Mining & Smelting Co. Ltd.
Inco Limited
International Minerals and Chemicals Canada Global Limited (IMC Kalium Canada Ltd.)
Iron Ore Company of Canada
Mines et exploration Noranda inc. – division de Matagami
Mines Wabush – gerees par la Compagnie minere Cliffs inc.
Newmont Canada Limited, Golden Giant Mine
Noranda Inc. – Brunswick Mining Division
Noranda Inc. – Brunswick Smelter
Noranda Metallurgy Inc. (Canadian Copper Refinery
Placer Dome Canada Limited
Quebec Cartier Mining Company
Syncrude Canada Ltd.
Teck Corporation

Petroleum Products

Amoco Canada Petroleum Company Limited
Canadian Tire Petroleum
Chevron Canada Limited – Burnaby Refinery
Enbridge Pipelines Inc.
Husky Oil Operations Ltd.
Imperial Oil Limited
Irving Oil Limited
Nova Corporation
PetroCanada Refining Ltd.
Shell Canada
Super Klean Corp.
Shell Canada Products Limited
Suncor Energy Inc. – Sunoco Group
Ultramar Ltd. (Saint Romuald refinery)

Plastics

Dow Chemical Company of Canada, Ltd.
Extrusion Plastics Ltd.
Husky Injection Molding Systems Ltd.

Potash

Potash Corporation of Saskatchewan Inc.
– Allan Division
– Cory Division
– Lanigan Division
– New Brunswick Division
– Patience Lake Division
– Rocanville Division

Pulp and Paper/Forestry

Abitibi-Consolidated Inc.
Bowater Pulp and Paper Canada Inc.
Canfor Corporation
Caribou Pulp and Paper Company Limited
Cascades Inc.
Daishowa Inc.
Emballages Smurfit-Stone Canada inc. – usine de La Tuque
Eurocan Pulp & Paper Company Limited
E.L. Stuart Inc.
Kruger Inc.
Lake Utopia Paper
Marathon Pulp Inc.
Maritime Paper Products Limited
Nextor Inc.
Norampac Inc. (Division of Cascades Inc.
Norske Skog Canada Ltd.
Paperboard Industries International Inc. (Division of Cascades Inc.)
Perkins Papers Inc. (Division of Cascades Inc.)
Riverside Forest Products Limited, Armstrong Division
Rolland Inc. (Division of Cascades Inc.)
St. Marys Paper Ltd.
Stora Enso North America, Port Hawkesbury Mill
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Dana Automotive Systems Canada, Ltd.
Ford Motor Company of Canada, Limited
General Motors of Canada Limited
Honda of Canada Mfg.
International Truck and Engine Corporation Canada
Orbitec Limited
Orenda Aerospace Corporation
Orion Bus Industries Inc.
Oxford Automotive, Inc. – Suspension Division, Chatham
Polywheels Manufacturing Ltd.
Pratt & Whitney Canada Inc.
Presstran Industries
Prevost Car Inc.
Rockwell Automation Canada Inc.
Russel Metals Inc.
Sterling Trucks, A Division of Freightliner Limited
Toyota Motor Manufacturing, Canada Inc.
TRW Automotive
Volvo Cars of Canada Ltd.
Woodbridge Group, The

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OEE

Office of Energy Efficiency
Office de l'efficacité énergétique

Leading Canadians to Energy Efficiency at Home, at Work and on the Road

The Office of Energy Efficiency of Natural Resources Canada is a dynamic organization with a mandate to renew, strengthen and expand Canada's commitment to energy efficiency in order to help address the challenges of climate change.